AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1.   (currently amended): A method of compressing image signals, comprising the steps of:

i)   obtaining a plurality of radiation image signals respectively representing a plurality of radiation images of an object, which radiation images have been formed with several kinds of radiation having different energy distributions,

ii)   obtaining an energy subtraction image signal, which has been formed from the plurality of the radiation image signals, and

iii)   performing <u>reversible</u> compression processing on the plurality of the radiation image signals and <u>irreversible compression processing on</u> the energy subtraction signal,

wherein the energy subtraction image signal is compressed with a compressibility higher than the compressibility with respect to each of the radiation image signals.

2.   (currently amended): An apparatus for compressing image signals wherein:

a plurality of radiation image signals respectively representing a plurality of radiation images of an object, which radiation images have been formed with several kinds of radiation having different energy distributions, are obtained,

an energy subtraction image signal, which has been formed from the plurality of the radiation image signals, is obtained, and

compression processing is performed on the plurality of the radiation image signals and

the energy subtraction image signal are compressed,

the apparatus comprising;

a)   radiation image signal compressing means for performing compression processing

on each of the radiation image signals with a <u>reversible</u> first compressing process, and

b)   energy subtraction image signal compressing means for performing compression

processing on the energy subtraction image signal with a <u>an irreversible</u> second compressing

process,

a compressibility in the second compressing process being higher than the

compressibility in the first compressing process.

3.   (canceled)

4.   (canceled).

5.   (currently amended): An apparatus as defined in Claim 2 ~~or 3~~ wherein the

compressibility in the first compressing process is set at 1.

6.   (canceled).

7.   (currently amended): An apparatus as defined in Claim 2, wherein the first compressing process is an irreversible compressing process utilizing a ~~low~~ compressibility lower than that used in the second compressing process, and

wherein the second compressing process is an irreversible compressing process.

8.   (previously presented): The method according to claim 1, wherein the compression processing corresponding to the energy subtraction image signal is represented by $1/n$, where n is an integer greater than or equal to 10.

9.   (previously presented): The method according to claim 1, wherein the compression processing corresponding to the plurality of radiation images is represented by $1/m$, where m is an integer less than or equal to 10.

10.   (previously presented): The method according to claim 9, wherein the compression processing corresponding to the plurality of radiation images is an irreversible compressing process.

11.   (currently amended): The method according to claim 1, wherein the compression processing corresponding to the plurality of radiation images is an irreversible compressing process utilizing a ~~low~~ compressibility lower than that used in the compression processing corresponding to the energy subtraction signal.

12.   (canceled).

13.   (previously presented): The method according to claim 1, wherein the compression processing corresponding to the plurality of radiation images is an irreversible compression process, and

wherein the compression processing corresponding to the energy subtraction image signal is an irreversible compressing process.

14.   (previously presented): The method according to claim 1, wherein the compression processing corresponding to the plurality of radiation images is a reversible compression process, and

wherein the compression processing corresponding to the energy subtraction image signal is a reversible compressing process.

15.   (currently amended): An apparatus as defined in claim ~~3~~ 2, wherein the first compressing process utilizes a ~~low~~-compressibility lower than that used in the second compressing process.